

DISCLAIMER: These Standard Operating Procedures (SOP's) are for the exclusive use of Navy Public Works Center (PWC) Norfolk. They are promulgated as guidance for their NAVFAC Commands. If intended to be used by other activities, they must be tailored to each activity's particular requirements and must be reviewed/approved by the activity's safety professionals prior to use.

---

**NAVY PUBLIC WORKS CENTER  
NORFOLK, VIRGINIA  
UTILITIES DEPARTMENT**

**STANDARD OPERATING PROCEDURE / JOB HAZARD ANALYSIS**

**TITLE**

**REPLACE TRANSFORMER COOLING FAN**

**PROCEDURE NUMBER**

**WC 624 HVE 079**

**SIGNED:** \_\_\_\_\_  
(DATE)

**APPROVED:** \_\_\_\_\_  
(DATE)

**SAFETY PROFESSIONAL:** \_\_\_\_\_  
(DATE)

**MANAGEMENT OFFICIAL:** \_\_\_\_\_  
(DATE)

**REVISION**

**A**

REPLACE TRANSFORMER COOLING FAN

DISTRIBUTION

CODE	REV/DATE	REV/DATE	REV/DATE	REV/DATE	REV/DATE	REV/DATE	REV/DATE
601.C3							
620							
622							
610.E1							
622.3							

REPLACE TRANSFORMER COOLING FAN

REVISIONS

REV	DESCRIPTION	SIGNATURE	DATE
A	Initial Issue.		

## REPLACE TRANSFORMER COOLING FAN

**Purpose:**

Procedure to replace a transformer's cooling fan.

**Potential Energy Sources:**

1. 208Y120, 120/240 fan power circuit.
2. Exposed 34.5/11.5/4.16 kv conductors.

**Tools and PPE:**

Tools: Hand tools, voltage tester. PPE: Work gloves, safety shoes, Nomex coveralls, and back brace if required by back injury prevention and control program.

**References:**

1. PWC Occupational Safety and Health Program Manual, PWCNORVAINST 5100.33E
2. Occupational Safety and Health Standards for General Industry (29 CFR PART 1910): Subpart I, Personnel Protective Equipment; Subpart R, Electrical Power Generation / Transmission / Distribution; Subpart S, Electrical
3. NFPA 70 E approach distances to exposed, energized, electrical conductors and circuit parts.
4. SOP WC 622 HVE 013, Hazardous Energy Control(Lockout, Tagout)

**Procedures:**

The required PPE for the work will be work gloves, safety shoes, and back brace if required to wear one. If there are exposed, energized, 11.5/4.16/2.4 kv conductors within 16 feet of work site, then Nomex coveralls must be worn. If there are exposed, energized, 34.5 kv conductors within 19 feet of the work site, then Nomex coveralls must be worn.

1. Deenergize the fan's power circuit per SOP WC 622 HVE 013, Hazardous Energy Control(Lockout/Tagout). Test the circuit's voltage to verify it is deenergized.
2. Unplug the fan's power cord, or disconnect fan from power circuit if a power cord is not used.
3. Remove the fan's mounting hardware and then remove the fan.
4. Install new fan and secure with mounting hardware.
5. Plug in the fan's power cord or connect fan to power circuit by other means.
6. Energize the fan's power circuit per SOP WC 622 HVE 013, Hazardous Energy Control(Lockout/Tagout).

END